

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/701,198	11/04/2003	Gino Saccon	GSAC-1-1002	5040
7590 09/28/2005			EXAMINER	
Mark L. Lorbiecki, Esq. BLACK LOWE & GRAHAM PLLC Suite 4800 701 Fifth Avenue Seattle, WA 98104			SHAW, CLIFFORD C	
			ART UNIT	PAPER NUMBER
			1725	
			DATE MAILED: 09/28/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/701,198	SACCON ET AL.				
Office Action Summary	Examiner	Art Unit				
	Clifford C. Shaw	1725				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
· · · · · · · · · · · · · · · · · · ·	action is non-final.					
·=	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	· · · · · · · · · · · · · · · · · · ·					
6)⊠ Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examine	9\□ The specification is objected to by the Evaminer					
10)⊠ The drawing(s) filed on <u>04 November 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correc						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)		-				
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Informal Patent Application (PTO-152)						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 0118.	6) Other:	ratent Application (PTO-152)				
LUS. Patent and Trademark Office PTOL-326 (Rev. 7-05) Office A	ction Summary	Part of Paper No./Mail Date 0923				

Application/Control Number: 10/701,198 Page 2

Art Unit: 1725

claims are.

## **Detailed Action**

1.) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2.) Claims 5 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claims 5 and 13, it is not clear how a wire feed sensor can be configured to sense a temperature of a switch, making it unclear what the scopes of these

3.) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4.) Claims 1-3, 6, 8-11, 14, and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizuno et al. (4,479,046, cited by applicant). Figures 3 and 5 and the discussion thereof in the patent to Mizuno et al. (4,479,046) disclose a solid state arrangement for an arc welder with the features claimed, including: processor assembly 20 generating a logical signal on the line to switch 2; a current sensor at 4; and pulse width modulation inherently associated with the operation of the circuit in figure 5.

Application/Control Number: 10/701,198 Page 3

Art Unit: 1725

5.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6.) Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. (4,479,046). The claims differ from Mizuno et al. (4,479,046) in calling for the use of a field effect transistor. This difference does not patentably distinguish over the prior art. It would have been obvious to have used any well known type of transistor in Mizuno et al. (4,479,046), including a field effect transistor, based on routine circuit design considerations.
- 7.) Claims 4, 12, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. (4,479,046) taken with Katooka et al. (2002/0038795, cited by applicant). The patent to Mizuno et al. (4,479,046) discloses the subject matter claimed, except for the limitations associated with the temperature sensor. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have provided the system of Mizuno et al. (4,479,046) with a temperature sensor as claimed, the motivation being the teachings of Katooka et al. (2002/0038795) that such is advantageous in an arc welding power supply (see figure 3, elements 42 in Katooka et al. (2002/0038795)).

- 8.) Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizuno et al. (4,479,046) taken with Ueguri et al. (4,594,498). It would have been obvious to have provided the system of Mizuno et al. (4,479,046) with a wire feed speed sensor, the motivation being the teachings of Ueguri et al. (4,594,498) that it is advantageous to control the output of a welding power supply on the basis of sensed wire feed speed (see the abstract and the discussion at column 13 in Ueguri et al. (4,594,498)).
- 9.) The patent to Bodewig (4,686,350) and the Japanese document no. JP61-279366A are cited to show prior art arc welding power supplies that include a semiconductor switching element in series with the main arc current.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/701,198 Page 5

Art Unit: 1725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Clifford C Shaw Primary Examiner Art Unit 1725

September 23, 2005